# Super Clean<sup>™</sup> Gas Filters





2015
www.sgt-nl.com

- Ideal for Central Purifying Solutions
- Largest Big Trap Available
- High Pressure Stainless Steel
- High-purity output ensures99.9999% Pure gas
- Click-On fittings for easy, leaktight cartridge changes

**OVERVIEW** Click-On Big Trap Brochure

#### **ABOUT CLICK-ON INLINE BIG TRAPS**

Click-On Inline Super-Clean™ Big Traps are inline traps designed with Click-On adaptor connectors which allows inline cartridges to be exchanged without introducing oxygen. Spring loaded check valves seal when a filter is removed and open only when a new filter has been locked in place. There is no need for loosening and tightening fittings every time a trap is changed and your system will not become contaminated during the process.

#### WHY GAS PURITY IS IMPORTANT

Carrier gas should contain less than 1ppm of oxygen, moisture, or other trace contaminants, to prevent column degradation, increase column lifetime, and decrease stationary phase bleed. The expense of using high-purity gases in combination with carrier gas line purifiers will be offset by longer column lifetime and less GC maintenance.

Contaminants cause ghost peaks to appear during temperature programming and degrade the validity of analytical data. Make-up gas also should be contaminant-free, or baseline fluctuations and excessive detector noise can occur; detector gases should be free of water and hydrocarbons, or excessive baseline noise can result. Gas purifiers remove these contaminants from gas sources, thereby improving system performance.

#### **CLICK-ON INLINE BIG TRAP SYSTEM COMPONENTS**



#### **Click-On Connectors**

Re-usable In- and outlet adapter connectors which allows inline cartridges to be exchanged without introducing contaminants

Spring loaded check valves seal when a filter is removed and open only when a new filter has been locked in place.



The Click-On Big Trap is completely made out of stainless steel and can withstand high pressures.

The seals at each side of the trap will only be punctured when the Click-On connector is locked in place.



#### **Big Trap Mounting Brackets**

Included in every installation kit are the wall mounting clamps to mount a Big trap to a wall or surface.



#### **Electronic Indicator**

Optional Electronic Maintenance Indicator device warns when scheduled replacement or maintenance is due.





# GC / MS (ITD/MSD)



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Click-On Connector Set	**	1



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Click-On Connector Set	**	1

#### GC / ECD



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Oxygen/ Moisture) Big Trap	SGT-COBT1004	1
Click-On Connector Set	**	2

## **ICP-OES / ICP-MS**

Plasma Gas = Nebulizer Gas



Product	Part No.	Qty
Combi (Oxygen/ Moisture) Big Trap	SGT-COBT1004	1
Particle Filter	B0060	1
Click-On Connector Set	**	1

#### **ICP-OES**

Different Optic Flush Gas

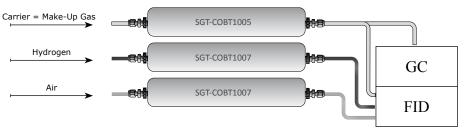


Product	Part No.	Qty
Combi (Oxygen/ Moisture) Big Trap	SGT-COBT1004	2
Particle Filter	B0060	1
Click-On Connector Set	**	2

- SGT-COBT1006 Helium Specific
- SGT-COBT1008 Hydrogen Specific
- CO2002 Click-On Connector Set 1/8 " Brass
- CO2001 Click-On Connector Set 1/4" Brass
- CO2011 Click-On Connector Set 1/8" Stainless Steel
- CO2010 Click-On Connector Set 1/4" Stainless Steel

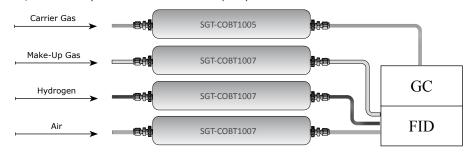
#### GC / FID





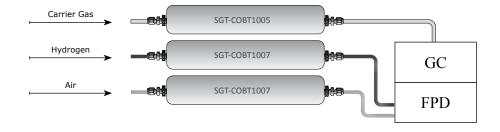
Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	2
Click-On Connector Set	**	3

#### GC/FID Solution 2 (Carrier Gas differs from Make-Up Gas)



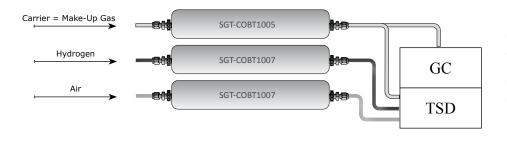
Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	3
Click-On Connector Set	**	4

#### GC / (FPD/PFPD)



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	2
Click-On Connector Set	**	3

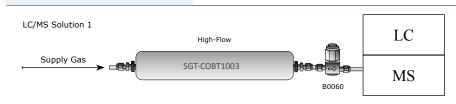
### GC / (TSD/TID/NPD/PND)



Part No.	Qty
SGT-COBT1005 *	1
SGT-COBT1007	2
**	3
	SGT-COBT1005 * SGT-COBT1007

- SGT-COBT1006 Helium Specific
- SGT-COBT1008 Hydrogen Specific
- CO2002 Click-On Connector Set 1/8 " Brass CO2001 Click-On Connector Set 1/4" Brass
- CO2011 Click-On Connector Set 1/8" Stainless Steel CO2010 Click-On Connector Set 1/4" Stainless Steel

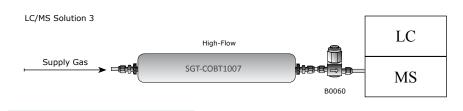
#### LC/MS



Product	Part No.	Qty
Hydrocarbon Big Trap	SGT-COBT1003	1
Particle Filter	B0060	1
Click-On Connector Set	**	1



Product	Part No.	Qty
Moisture Big Trap	SGT-COBT1001	1
Particle Filter	B0060	1
Click-On Connector Set	**	1



Product	Part No.	Qty
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	1
Particle Filter	B0060	1
Click-On Connector Set	**	1

#### **TOC Analyzer**



Product	Part No.	Qty
Combi (CO <sub>2</sub> / Moisture) Big Trap	SGT-COBT1010	1
Click-On Connector Set	**	1

#### **Zero-Air Generator**



Product	Part No.	Qty
Combi (CO <sub>2</sub> / Moisture) Big Trap	SGT-COBT1010	1
Click-On Connector Set	**	1

CO2002 - Click-On Connector Set 1/8 " Brass CO2001 - Click-On Connector Set 1/4" Brass CO2011 - Click-On Connector Set 1/8" Stainless Steel CO2010 - Click-On Connector Set 1/4" Stainless Steel

Catalog No.	SGT-COBT1001
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

#### **MOISTURE BIG TRAP**

Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

Capacity	
H <sub>2</sub> O	210 g

Catalog No.	SGT-COBT1002
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

#### **OXYGEN BIG TRAP**

Oxygen is column killer. It is present even in UHP gases, as minutes leaks at fittings allow oxygen to influx against the concentration gradient. Because oxygen can enter a gas line at any fitting or during gas bottle exchange, the oxygen trap should be the last connection before the gas line enters the chromatograph.

Capacity		
O <sub>2</sub>	4.5 L	

SpecificationsOutlet Gas Quality (%)> 99.9999Maximum Pressure11 bar (160 psi)Maximum Flow25 L/min.Usable ForInert carrier gas, He, H2, N2, AR, AirDimensions22 inch x Ø 2.5 inchWeight3 Kg	Catalog No.	SGT-COBT1003
Maximum Pressure11 bar (160 psi)Maximum Flow25 L/min.Usable ForInert carrier gas, He, H2, N2, AR, AirDimensions22 inch x Ø 2.5 inch	Specifications	
Maximum Flow  25 L/min.  Usable For Inert carrier gas, He, H2, N2, AR, Air  Dimensions  22 inch x Ø 2.5 inch	Outlet Gas Quality (%)	> 99.9999
Usable For Inert carrier gas, He, H2, N2, AR, Air  Dimensions 22 inch x Ø 2.5 inch	Maximum Pressure	11 bar (160 psi)
Dimensions 22 inch x Ø 2.5 inch	Maximum Flow	25 L/min.
<u> </u>	Usable For	Inert carrier gas, He, H2, N2, AR, Air
Weight 3 Kg	Dimensions	22 inch x Ø 2.5 inch
	Weight	3 Kg
Estimated Lifetime 3 - 5 years	Estimated Lifetime	3 - 5 years

# **HYDROCARBON BIG TRAP**

Use a hydrocarbon trap if your gas has a potential source of hydrocarbon contaminants or if you suspect you are observing carrier gas ghost peaks.

Install the hydrocarbon trap after the moisture trap, to prevent moisture from degrading the hydrocarbon-trapping ability of the activated carbon in the hydrocarbon trap.

Capacity	
НС	360 g (as <i>n</i> -butane)

99.9999
1 bar (160 psi)
5 L/min.
ert carrier gas, He, H2, N2, AR, Air
2 inch x Ø 2.5 inch
Kg
- 5 years

#### **CARBON DIOXIDE BIG TRAP**

Removes carbon dioxide and sulfur from gas streams. To be used in combination with a Moisture Big trap.

Capacity		
CO <sub>2</sub>	450 g	

1 0

1 0

Catalog No.	SGT-COBT1007
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

SGT-COBT1007
> 99.9999
11 bar (160 psi)
25 L/min.
Inert carrier gas, He, H2, N2, AR, Air
22 inch x Ø 2.5 inch
3 Kg
3 - 5 years

# COMBI (HYDROCARBON/ **MOISTURE) BIG TRAP**

The Fuel Gas Inline trap is perfect for purifying flame ionization detector (FID) fuel gases, removing both moisture and hydrocarbons. Using the Fuel Gas Filter for FID Hydrogen and air will produce a stable baseline, improving overall reproducibility and sensitivity.

Capacity	
H <sub>2</sub> O	105 g
НС	180 g (as <i>n</i> -butane)

SGT-COBT1004
> 99.9999
11 bar (160 psi)
25 L/min.
Inert carrier gas, He, H2, N2, AR
22 inch x Ø 2.5 inch
3 Kg
3 - 5 years

COMBI	(OXYGEN/MOISTURE)
BIG TRA	\P

The Combi trap is ideal for purifying carrier gas. It contains oxygen and moisture scrubbers in one easy to change economical cartridge.

Capacity	
H <sub>2</sub> O	105 g
<b>O</b> <sub>2</sub>	2.25 L

Catalog No.	SGT-COBT1010
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

# **COMBI (MOISTURE/CARBON DIOXIDE) BIG TRAP**

Removes carbon dioxide and sulfur from gas streams. This combination trap also removes moisture.

Capacity	
H <sub>2</sub> O	105 g
CO <sub>2</sub>	225 g

Catalog No.	SGT-COBT1005 SGT-COBT1006 (Helium specific) SGT-COBT1008 (Hydrogen specific)
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

# TRIPLE (OXYGEN/MOISTURE/ **HYDROCARBON) BIG TRAP**

The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge.

Capacity	
H <sub>2</sub> O	70 g
0,	2 L
НС	120 g (as <i>n</i> -butane)

Catalog No. CO2002

**Usable for** 

1/8" Brass tubing



1/8" BRASS
CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/8" Brass

Catalog No. CO2011

**Usable for** 

1/8" Stainless Steel tubing



1/8" STAINLESS STEEL CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/8" SS

Catalog No. CO2001

**Usable for** 

1/4" Brass tubing



1/4" BRASS
CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/4" Brass

Catalog No. CO2010

**Usable for** 

1/4" Stainless Steel tubing



1/4" STAINLESS STEEL CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/4" SS

Catalog No. CO2020

**Usable for** 

Big Traps



DOUBLE CLICK-ON CONNECTOR

A Double Connector to connect two Click-On Traps together

Catalog No. SGT-E0030
Usable for



**ELECTRONIC INDICATOR** 

Electronic Maintenance Indicator for use with Click-On Inline Big Trap. Includes Electronic Indicator Device, Battery, USB Cable and Mounting clip.

Catalog No. CO3001

**Usable for** 

**Big Traps** 

All click-on connectors



**O-RING REPLACEMENT SET** 

A set of 10 + 10 Replacement O-rings for Click-On Inline Connectors.

Catalog No. CO3003

**Usable for** 

Big Traps



**WALL MOUNT BRACKET SET** 

Two wall mount brackets suitable for mounting a Click-On Big Trap.

Catalog No. B0060

**Usable for** 

High flow applications



**PARTICLE FILTER** 

Particulate filter for high flow applications.

Catalog No. B0065

**Usable for** 

Particle Filter



PARTICLE FILTER
REPLACEMENT CUPS

0.5 Micron Particle Filter Replacement Cups for use with Particle Filter.

# **Installation Kits**

Part No. *	Description	qty.
SGT-COBT1001-S4	Click-On Inline Moisture Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1002-S4	Click-On Inline Oxygen Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1003-S4	Click-On Inline Hydrocarbon Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1009-S4	Click-On Inline Co2 Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1004-S4	Click-On Inline Combi (Oxygen/Moisture) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1007-S4	Click-On Inline Combi (Hydrocarbon/Moisture) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1010-S4	Click-On Inline Combi (Co2/Moisture) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1005-S4	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1006-S4	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) He Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1008-S4	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) H2 Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.

# **Replacement Traps**

Part No.	Description	qty.
SGT-COBT1001	Click-On Inline Moisture Big Trap Moisture Replacement Trap	ea
SGT-COBT1002	Click-On Inline Oxygen Big Trap Oxygen Replacement Trap	ea
SGT-COBT1003	Click-On Inline Hydrocarbon Big Trap Hydrocarbon Replacement Trap	ea
SGT-COBT1009	Click-On Inline Carbon dioxide Big Trap Carbon dioxide Replacement Trap	ea
SGT-COBT1004	Click-On Inline Combi (Oxygen/Moisture) Big Trap Combi Oxygen/moisture Replacement Trap	ea
SGT-COBT1007	Click-On Inline Combi (Hydrocarbon/Moisture) Big Trap Combi Hydrocarbon/Moisture Replacement Trap	ea
SGT-COBT1010	Click-On Inline Combi (Carbon dioxide/Moisture) Big Trap Combi Carbon dioxide/Moisture Replacement Trap	ea
SGT-COBT1005	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) Big Trap Kit Triple Oxygen/Moisture/Hydrocarbon Replacement Trap	ea
SGT-COBT1006	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) He Big Trap Kit Triple Oxygen/Moisture/Hydrocarbon Replacement Trap (Conditioned with Helium)	ea
SGT-COBT1008	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) H2 Big Trap Kit Triple Oxygen/Moisture/Hydrocarbon Replacement Trap (Conditioned with Hydrogen)	ea

<sup>\*</sup> Standard fittings are 1/4" Stainless Steel. All Kits are available in 1/4" to 1/8" Brass and Stainless steel fittings.

To order, replace Part No. suffix into '-B4' for 1/4" Brass, '-B8' for 1/8" Brass and '-S8' for 1/8" Stainless steel fittings.

# **Connector Sets**

Part No.	Description	qty.
CO2001	Click-On Connector Set 1/4" Brass A set of 2 Click-On Inline Trap Connectors	ea.
CO2002	Click-On Connector Set 1/8" Brass A set of 2 Click-On Inline Trap Connectors	ea.
CO2010	Click-On Connector Set 1/4" Stainless Steel A set of 2 Click-On Inline Trap Connectors	ea.
CO2011	Click-On Connector Set 1/8" Stainless Steel A set of 2 Click-On Inline Trap Connectors	ea.
CO2020	Click-On Double Connector Set A Double Connector to connect two Click-On Inline Traps together	ea.
CO3001	Replacement O-ring Set for Click-On Connectors A set of 10 + 10 Replacement O-rings for Click-On Inline Trap Connectors	20/pk.

# Accessories

CO3003	Big Trap Wall-mounting Bracket Set  Contains two Wall mount brackets suitable for mounting a genuine Click-On Inline Big Trap	2/pk.
B0060	Particle Filter  0.5 Micron Particle Filter recommended to be used in combination with a Big Trap when using high flow applications such as LC/MS	ea.
B0065	0.5 Micron Particle Filter Cup Replacement Pack Contains twelve 0.5 Micron Particle Filter Replacement Cups for use with Particle Filter	12/pk.
SGT-E0030	Electronic Maintenance Indicator Kit for Click-On Big Trap For use with Click-On Inline Big Trap. Includes Electronic Indicator Device, Battery, USB Cable and Mounting clip.	ea.



